

**REMARKS**

Claims 1-28 and 30-35 are pending. Claims 7, 8, 13, 14, 18-20, 27-28, and 34 are withdrawn. Claims 1-5, 9, 10, 12, 15, 21, 22, 31, and 35 are amended. The claim amendments are fully supported by the specification, and no new matter is being added.

**Rejection of claims 1-6, 9-12, 15-17, 21-26, 30-33, and 35 under 35 U.S.C. §112, second paragraph**

The office action states that claims 1-6, 9-12, 15-17, 21-26, 30-33, and 35, and 37 are rejected under §112, second paragraph as indefinite on a number of grounds.

The office action states that claims 1 and 2 are rejected for the recitation of “providing a population of transgenic fly larvae comprising a human neurodegenerative disease gene” because it is unclear whether the members of the population comprises the neurodegenerative disease gene. Claims 1 and 2 have been amended to require that the transgenic fly larvae of the population comprise the neurodegenerative disease gene, and believe that the claim is clear and definite.

The office action states that claims 1 and 2 are rejected for the recitation of “a said test agent” because it is confusing whether the claim refers to “said test agent” or a different test agent. Applicants have amended claims 1 and 2 to clarify reference to said test agent.

The office action states that claim 1 is unclear whether the traits compared before and after administration of the test agent are the same trait. Applicants have amended claim 1 as suggested in the office action to clarify the metes and bounds of the claim.

The office action states that there is insufficient antecedent basis in claim 5 and 9 for the phrase “said trait” because the claims from which it depends recites “at least two traits.” Applicants have amended claim 5 to recite proper antecedent basis.

The office action states that the phrase “more or less similar” recited in claims 10 and 15 is a relative term which renders the claim indefinite. Claims 10 and 15 have been amended to clarify that the comparison between the agent phenoprofile and reference phenoprofile is to determine whether the agent phenoprofile is “more similar or less similar” to the reference phenoprofile. While the terms “more” and “less” are terms of degree, this does not render the claim unclear. One of skill in the art would understand that the claim requires the selection of a test agent that results in an increase or decrease in the differential between the agent and reference phenoprofiles. Because the phenoprofile is a collection of numerical values representing certain traits measured in the fly population, one of skill in the art could readily determine whether the numbers in the agent phenoprofile were increased or decreased relative to the numbers of the reference phenoprofile; that is, whether the agent phenoprofile is more similar or less similar to the reference phenoprofile. A strict numerical cut-off is not required for one of skill in the art to determine whether the agent phenoprofile is more similar or less similar than the reference phenoprofile, thus, the claims are definite as currently drafted.

The office action states that the “step of determining” in claims 12 and 21 lacks sufficient antecedent basis. The claims have been amended to recite proper antecedent basis.

The office action states that the term “said at least two traits” recited in claim 22 lacks proper antecedent basis. The claims have been amended to correct this deficiency.

The office action states that, in claim 35, the relationship between the steps of “providing”, “administering”, “creating”, “generating”, and “identifying” is not clear since the result of the “creating” step is not used in the “generating” step. Applicants have amended claim 37 to clarify that the result of the creating step is used in the generating step.

In view of the foregoing, Applicants believe that the claims are clear and definite and request that the rejection under §112, second paragraph be reconsidered and withdrawn.

**Rejection of claims 1-6, 9-12, 15-17, 21-26, 30-33, and 35 under 35 U.S.C. §102(e)**

The office action states that the claims are rejected under §102 as anticipated by Botas et al. The office action states that Botas et al. teaches a method of screening for a compound having activity against neurodegenerative disorder in transgenic fly larvae comprising providing a population of transgenic insects having a human neurodegenerative disease gene, administering an agent, creating a digital image showing a trait in the population, and correlating the trait with the effect. Applicants respectfully disagree and traverse the rejection.

It is well settled law that anticipation requires that the purported prior art reference disclose each and every limitation of the claim. *Atlas Powder Company et al. v. IRECO, Incorporated et al.*, 190 F.3d 1342, 1347 (Fed. Cir. 1999).

The independent claims have been amended to modify the recitation of “creating a digital image” to “creating a plurality of digital frames of a movie.” Support for this amendment is the specification as originally filed and at least at page 26-27.

Botas et al. does not teach a method for determining whether a test has an effect on a population of fly larvae comprising creating a series of digital frames of a movie showing a trait of specimens in the population as required by claims 1, 2, and 37. All other pending claims are dependent and, thus, incorporate the limitation of creating a digital image showing a trait of specimens in the population. Accordingly, Botas et al does not teach each element of the claimed invention and, therefore, does not anticipate the claims. Applicants therefore request that the rejection be reconsidered and withdrawn.

**Double patenting**

The office action states that the claims are provisionally rejected under the doctrine of obviousness-type double patenting as being unpatentable over the claims of co-pending application 10/618,913. Applicants will consider filing a terminal disclaimer to overcome this rejection upon notification of otherwise allowable claims in the instant case.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

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